Benchmark Examination Test Item Map
Number of Test Questions by Performance Standard in Reading, Writing and Mathematics: Grade 8

Performance Standards: Reading and Writing	Number of Test Questions			Percent of Emphasis	Total Raw Score Points
	Multiple-choice	Short Response	Extended Response		
Reading Totals	30	5	1	100%	41
R3.1 Determine meaning of words	3	1		10%	4
R3.3 Restate and summarize information; make connections	4	2		17%	7
R3.4 Identify and assess evidence that supports main ideas	5			12%	5
R3.5 Read and follow multi-step directions	4			10%	4
R3.6 Explain conventions of genres	4			10%	4
R3.7 Analyze narrative elements	3	1		12%	5
R3.8 Differentiate fact and opinion; analyze author's purpose	4			10%	4
R3.9 Support understanding of a theme	3	1	1	19%	8
Writing Totals	30	5	1	100%	58
W3.1 Write compositions W3.2 Write to achieve purposes	0	4	1	38%	22
W3.3 Use correct grammar, sentence construction, paragraph structure, punctuation, spelling, and usage	15	1		36%	21
W3.4 Revise writing to improve organization, word choice, and paragraph development	15			26%	15

Benchmark Examination Test Item Map
Number of Test Questions by Performance Standard in Reading, Writing and Mathematics: Grade 8

Performance Standards: Mathematics	Number of Test Questions			Percent of Emphasis	Total Raw Score Points
	Multiple-choice	Short Response	Extended Response		
A1: **Numeration**	**4**	**1**		**13%**	**6**
A1.3.1 Read, write, model, order real numbers explaining representations of scientific notation, exponents, and percents.	1				
A1.3.2 Model counting in a different base system.					
A1.3.4 Translate between equivalent representations of the same number. Select a representation that is appropriate for the situation.	1				
A1.3.5 Describe and model the relationship of fractions to decimals, percents, ratios, and proportions.					
A1.3.6 Use, explain and define the rules of divisibility, prime and composite numbers, multiples, and order of operations.	1	1			
A1.3.7 Use commutative, identify associative, and distributive properties with variables.	1				
A2: **Measurement**	5	1		**15%**	**7**
A2.3.1 Estimate and measure various attributes to a specified degree of accuracy.	1				
A2.3.2 Estimate and convert measurements within the same system.	2				

Benchmark Examination Test Item Map
Number of Test Questions by Performance Standard in Reading, Writing and Mathematics: Grade 8

Performance Standards: Mathematics	Number of Test Questions			Percent of Emphasis	Total Raw Score Points
	Multiple-choice	Short Response	Extended Response		
A2.3.3 Use a variety of methods and tools to construct and compare plane figures of given measures.					
A2.3.4 Describe and apply the relationships between dimensions of geometric figures to solve problems using indirect measurement; describe and apply the concepts of rate and scale.	1	1			
A2.3.5 Apply information about time zones and elapsed time to solve problems.	1				
A3: **Estimation and Computation**	**5**	**1**		**16%**	**7**
A3.3.1 Apply, explain, and assess the appropriateness of a variety of estimation strategies including truncation, rounding to compatible numbers.	2				
A3.3.2 Apply operations efficiently and accurately, using estimation to check the reasonableness of results. **(This will be encompassed in A3.3.3)**					
A3.3.3 Add and subtract fractions, decimals, and percents.	2				
A3.3.4 Multiply and divide rational and common irrational numbers in various forms including fractions, decimals, and percents.	1	1			
A3.3.5 Convert between equivalent fractions, decimals, percents, proportions. Convert from exact to decimal representations of irrational numbers.					

Benchmark Examination Test Item Map
Number of Test Questions by Performance Standard in Reading, Writing and Mathematics: Grade 8

Performance Standards: Mathematics	Number of Test Questions			Percent of Emphasis	Total Raw Score Points
	Multiple-choice	Short Response	Extended Response		
A3.3.6 Solve problems using ratios and proportions.					
A4: **Functions and Relationships**	7	1		**20%**	**9**
A4.3.1 Identify numeric and geometric patterns to find the next term and the nth term.	2	1			
A4.3.2 Identify and describe how a change in one variable in a function effects the remaining variables (e.g., how changing the length effects the area and volume of a rectangular prism).	1				
A4.3.3 Use a calculator to find a missing item in an arithmetic and a geometric sequence; predict the graph of each function.					
A4.3.4 Translate among and use tables of ordered pairs, graphs on coordinate planes, and linear equations as tools to represent and analyze patterns.					
A4.3.5 Find the value of a variable by evaluating formulas and algebraic expressions for given values.	4				
A5: **Geometry**	**5**		**1**	**20%**	**9**
A5.3.1 Identify, classify, compare, and sketch regular and irregular polygons.					
A5.3.2 Model, identify and describe 3-dimensional figures including tetrahedrons, dodecahedrons, triangular prisms, and rectangular prisms) .					
A5.3.3 Apply the properties of equality and proportionality to solve problems involving congruent or similar shapes (e.g., create a scale drawing of a proposed playground).			1		

Benchmark Examination Test Item Map
Number of Test Questions by Performance Standard in Reading, Writing and Mathematics: Grade 8

Performance Standards: Mathematics	Number of Test Questions			Percent of Emphasis	Total Raw Score Points
	Multiple-choice	Short Response	Extended Response		
A5.3.4 Estimate and determine volume and surface areas of solid figures using manipulatives and formulas; estimate and find the circumferences and areas of circles	1				
A5.3.5 Draw and describe the results of transformations including translations (slides), rotations (turns), reflections (flips), and dilations (shrinking or enlarging).	3				
A5.3.6 Use coordinate geometry to represent and interpret relationships defined by equations and formulas including distance and midpoint.	1				
A5.3.7 Draw measure and construct geometric figures including perpendicular bisectors, polygons with given dimensions, circles with given dimensions, perpendicular and parallel lines.					
A6: **Statistics and Probability**	**3**	**2**		**16%**	**7**
A6.3.1 Collect and analyze and display data creating a variety of visual displays including frequency distributions, circle graphs, box and whisker plots, histograms, and scatter plots with and without technology.	1				
A6.3.2 Interpret and analyze information found in. newspapers, magazine) and graphical displays.	1	1			
A6.3.3 Determine and justify a choice of mean, median, mode, or range as the best representation of data for a practical situation.					

Benchmark Examination Test Item Map
Number of Test Questions by Performance Standard in Reading, Writing and Mathematics: Grade 8

Performance Standards: Mathematics	Number of Test Questions			Percent of Emphasis	Total Raw Score Points
	Multiple-choice	Short Response	Extended Response		
A6.3.4 Make projections based on available data and evaluate whether or not inferences can be made given the parameters of the data.	1				
A6.3.5 Use tree diagrams and sample spaces to make predictions about independent events.		1			
A6.3.6 Design and conduct a simulation to study a problem and communicate the results.					